

flange tapers twice forming two trapezoidal shapes before the web begins. This can be easily observed in Figure A.2. For the case of a girder such as this one, the user must treat the girder as if the lower portion of the top flange tapers into the web. The modified cross-section can be seen with dashed lines in Figure A.2. Also shown in the figure are the dimensions labeled "a" and "d", which are modified when the trapezoids are neglected. Ignoring the effect of these small areas will reduce the moment of inertia of the section slightly and is therefore conservative for the analysis.

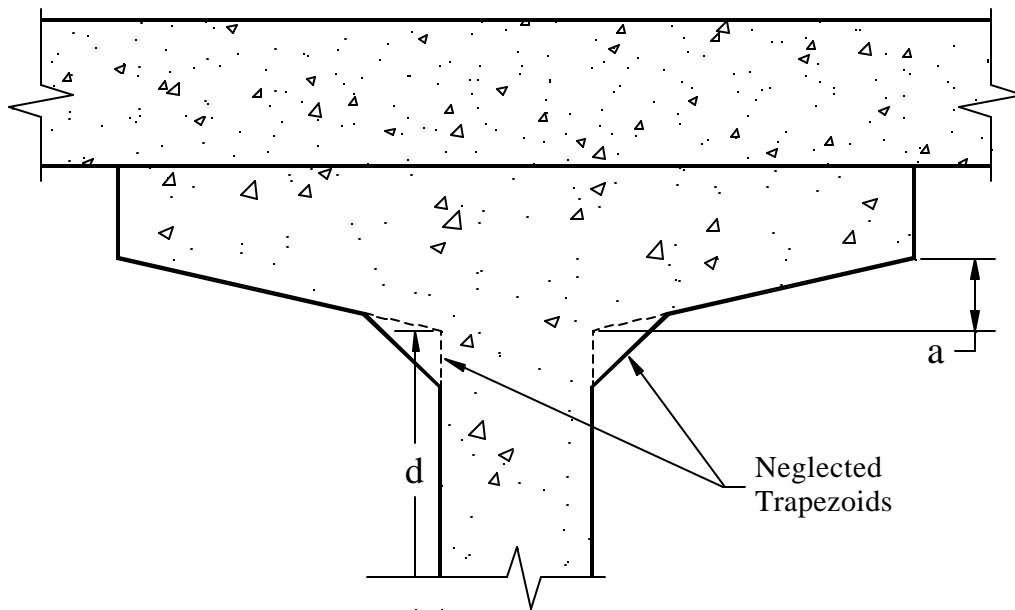


Figure A.2 Cross-section of a Type V or Type VI girder

The next two subsections of the User Inputs are Tendon Layout at Midspan and Prestressing Steel. *Cracked Beam* allows the user to input up to 16 layers of prestressing tendons. In each of the layers, the user is required to input the number of tendons in that layer, as well as the vertical distance from the bottom fiber of the concrete section to the centroid of the tendons in that layer. Three inputs are required regarding the properties of the prestressing steel.